

1. (Currently amended) A method of predicting a file download time, comprising:  
 periodically initiating a test probe from a server to a given point in a network in lieu of performing a file download;  
 collecting network performance data generated from the test probes;  
 computing an exponentially time-weighted average of the network performance data; and  
 using the exponentially time-weighted average of the network performance data to generate a value [[indicative]] predictive of the file download time.

2. (Original) The method as described in Claim 1 wherein the test probe is a ping.

3. (Original) The method as described in Claim 1 wherein the network performance data is latency.

4. (Currently amended) The method as described in Claim 3 wherein the time-weighted average is computed as:

$$AverageLatency = \sum_{i=0}^{\infty} lat \times e^{-t_i/C}$$

wherein  $lat$  is an  $i^{th}$  latency measurement made at a time  $t_i$  and  $C$  is a time constant.

5. (Currently amended) The method as described in Claim 4 wherein the value is equal to the following function:

average latency + {[max ([100] base constant, average latency)]\*(penalty factor)}, where the penalty factor is a given packet loss function, and max is a function that selects either the base constant or the average latency, whichever is greater.

6. (Original) The method as described in Claim 1 wherein the network performance data is packet loss.

7. (Currently amended) The method as described in Claim 6 wherein the time-weighted average is computed as:

$$AverageLoss = \sum_{i=0}^{\infty} loss \times e^{-t_i/C},$$

wherein  $loss$  is an  $i^{th}$  loss measurement made at a time  $t_i$  and  $C$  is a time constant.

8. (Currently amended) A method of predicting a file download time, comprising:

periodically initiating a test probe from a server to a given point in a network in lieu of performing a file download and measuring the file download time directly;

collecting latency and packet loss data generated from the test probes;

using the data to compute an exponentially time-weighted average of latency and a time-weighted average of loss as follows;

$$AverageLatency = \sum_{i=0}^{\infty} lat \times e^{-t_i/C}$$

$$AverageLoss = \sum_{i=0}^{\infty} loss \times e^{-t_i/C}$$

wherein  $lat$  is an  $i^{th}$  latency measurement made at a time  $t_i$ ,  $loss$  is an  $i^{th}$  loss measurement made at the time  $t_i$ , and  $C$  is a time constant.

and;

generating a score [[indicative]] predictive of the file download time, wherein the score is substantially equal to:

average latency + {[max (base constant, average latency)]\*(penalty factor)},

where the penalty factor is a function of the time-weighted average of loss and max is a function that selects either the base constant or the average latency, whichever is greater.

9. (Original) The method as described in Claim 8 wherein the penalty factor is modified according to a loss percentage.

10. (Currently amended) A method of predicting a file download time, comprising:

periodically initiating a test probe from a server to a given point in a network in lieu of performing a file download and measuring the file download time directly;

collecting latency and packet loss data generated from the test probes;

using the data to compute an exponentially time-weighted average of latency and a time-weighted average of loss; and

generating a value indicative of the file download time, wherein the value is a function of the time-weighted average of latency modified by a penalty factor that is a function of the time-weighted average of loss.